Pakistan Council of Scientific and Industrial Research Central Laboratories Karachi (Pakistan)

Mohammad Abdullah¹

Steriphodon doncasteri, a new species of Eurygeniini, with a review of the Indian species of Steriphodon Abeille²

(Coleoptera: Anthicidae)

With 27 textfigures

The generic name, Steriphodon, was proposed by Abellle in 1894 to receive two species which he had earlier in the same year described doubtfully in the genus Stereopalpus (ABEILLE, 1894). I have not examined specimens of the two species: S. chobauti (Algeria and Tunisia) and S. bedeli (Perim Island). The first Indian species that was assigned to this genus is Steriphodon indicum Pic, 1903 which I have studied. Since it is impossible to define a genus without reference to a species, it is necessary to have a type-species for Steriphodon. Unfortunately, ABEILLE (1894) did not designate one. According to the International Code of Zoological Nomenclature, only one of the two originally described species could be so designated in this case. In the belief that it could now be possible to understand the subjective taxon genus in objective terms with reference to a species, I designate S. chobauti as the type of the genus. This action is taken in consideration of the letter and the spirit of the Code. The present location of the types of Abeille is not known. Since there is no proof that Pic's generic association is wrong, it is wise to describe the species treated in this paper using the generic name which was used by Pic himself. In fact this is the only logical thing to do under the circumstances. I know that Eurygenius is an artificial group as it stands and that E. scoparius Champion, 1916 and S. indicum belong to the same genus. I have, therefore, transferred the former species to Steriphodon. A third Indian species is being described for the first time, along with key to the species and their descriptions.

The distinguishing characters of the genus as revealed by this study are: tarsal claws appendiculate; males with characteristic abdominal appendages (distinguishing from all other genera of Eurygeniini); eyes entire, widely separated; pronotum not campanulate in outline and with surface sculpture visible;

I The author would appreciate receiving reprints on the Coleoptera and comparitive morphology of the Insecta.

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pubescence uniform and elytra immaculate; eleventh antennal segment much less than twice longer than tenth segment.

In my key to the genera of Eurygeniini (ABDULLAH, 1964), this genus would key out to couplet 7 and to *Eurygenius*, from which it could be distinguished by its present distribution and by the first two mentioned characters above.

The inclusion of this genus in the tribe Eurygeniini extends the definition of the tribe so as to include forms with simple as well as appendiculate tarsal claws.

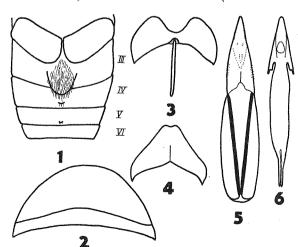
Key to the Indian species of Steriphodon Abellle

1	Abdominal appendages present (fig. 1) males 2
	Abdominal appendages absent females 4
2	Abdominal appendage long, extending from first visible sternite to third (fig. 8); seventh sternite emarginate (fig. 9); eighth tergite entire (fig. 11) S. indicum Pic
	Abdominal appendage short, extending from first visible sternite to second (figs. 1, 17); seventh sternite entire (figs. 2, 18); eighth tergite emarginate (figs. 4, 20) 3
3	Abdominal appendage extending to the apex of the second visible sternite (fig. 17); tegmen with parameres longer than the basal-piece (fig. 21)
-	Abdominal appendage extending to less than half the length of the second visible sternite (fig. 1); tegmen with parameres shorter than the basal-piece (fig. 5)
4	Seventh tergite weakly emarginate (fig. 15)

Steriphodon doncasteri sp. n.

(Figs. 1-6)

Holotype. Male (author's no. 494), Southern India, Ayur, North Salem, November 8, in the British Museum (Natural History), London.



Figs. 1—6. Steriphodon doncasteri spec. nov., holotype, male: 1, First four visible (morphologically III—VI) abdominal sternites, showing the male appendages; 2, seventh sternite; 3, eighth sternite; 4, eighth tergite; 5, tegmen, ventral view; 6, median lobe, ventral view

Colour. Black; eyes brown with black patches; elytra fuscous; abdomen rufous, last visible sternite fuscous.

Vestiture. Pubescence moderately dense, not concealing surface sculpture below; consisting of suberect to decumbent, cinereous to brown hairs.

Punctures. Coarse on pronotum, fine on elytra.

Head widest across eyes, slightly narrower than pronotum at its widest part. Tempora distinct, not prominent. Mandible entire at apex. Apical segment of maxillary palp subcultriform (triangular-elongated, rounded at apex). Eyes large, protuberant. Antennae filiform.

Pronotum widest subapically above middle; not sulcate medially. Wing with anal cell closed; cross-vein between $2dA_2$ and $2dA_3$ incomplete, between $3dA_1$ and $3dA_2$ complete.

Abdomen. Male appendage rounded and densely hairy at apex, short, extending from third (visibly first) sternite to less than half of length of fourth sternite (fig. 1). Seventh sternite entire at apex (fig. 2). Seventh tergite entire, slightly tapering at apex. Eighth sternite deeply emarginate at apex (fig. 3). Eighth tergite emarginate at apex (fig. 4). Tegmen dorsal, median lobe ventral in orientation. Parameres pointed at apex, irregularly polyspined dorsally and laterally; basal-piece longer than parameres, tripartite due to two longitudinal sulci (fig. 5). Median lobe with apical end nearly arrow-shaped; cuticular blades basally pointed, each blade with a small tooth; median struts short, nearly parallel (fig. 6).

Measurements in mm. Total length 5.5. Antenna: total length ?; segments I-XI: 0.42, 0.17, 0.33, 0.26, 0.26, 0.26, 0.25, ?, ?, ? and ? respectively. Maxillary palp: total length 0.67; segments I-IV: 0.05, 0.17, 0.15, and 0.30 respectively. Head: width across eyes 1.19; minimum dorsal interocular distance 0.44. Pronotum: length 1.28; width at apex 0.80; maximum width 1.42; width at base 1. Elytron: length 4; maximum width 1.20. Front tarsi missing. Middle tarsus: total length 1.04; segments I-V: 0.35, 0.18, 0.15, 0.09, and 0.27 respectively. Hind tarsus: total length 0.96; segments I-IV: 0.45, 0.15, 0.09, and 0.27 respectively. Hind tibial spur 0.17.

Paratypes. Five males, four of which are from the same locality as the holotype, are deposited in the B. M. (N. H.). A male (author's no. 493), collected on October 7 is nearly 4.5 mm in length. Two specimens, also taken on October 7, are both nearly 5 mm in length. In one of them the antennae are intact and the last two antennal segments are nearly equal in length; in the other the elytra are black. The fourth paratype was collected on October 10 and is nearly 4 mm in length. The fifth specimen, which is 5.5 mm in length, comes from Malabar, Kerala State and was collected on August 24. The elytra are brown.

Remarks. I have much pleasure in naming this species in honour of Mr. John Dongaster, Keeper of the Department of Entomology, B. M. (N. H.).

The female of this species remains to be discovered.

Steriphodon indicum Pic

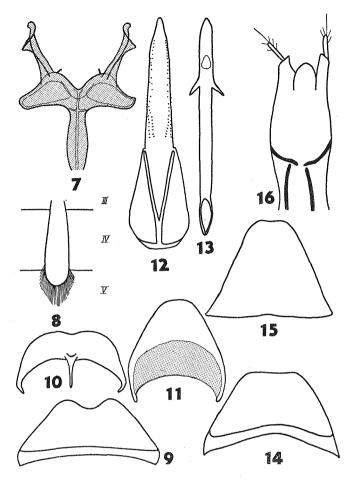
(Figs. 7 - 16)

Steriphodon indicum Pic, 1903, p. 120.

Male (author's no. 438), Southern India, Kodai Kanal (T. V. CAMPBELL), in the B. M. (N. H.).

Colour. Dark brown; eyes black, antennae and maxillary palpi mostly rufous; pronotum fuscous; elytra and legs light brown to rufous.

Vestiture. Pubescence sparse, not concealing surface sculpture below; consisting of decumbent, short, cinereous hairs.



Figs. 7-16. Steriphodon indicum Pic: 7, Metendosternite of male; 8, abdominal appendage of male; 9, seventh sternite of male; 10, eighth sternite of male; 11, eighth tergite of male; 12, tegmen of male, ventral view; 13, median lobe of male, ventral view; 14, seventh sternite of female; 15, seventh tergite of female; 16, apex of ovipositor of female, ventral view

Punctures. Coarse on pronotum and vertex, fine on elytra.

Head widest across eyes, nearly as wide as pronotum at its widest part. Tempora distinct, not prominent. Mandible entire at apex. Apical segment of maxillary palp cultriform. Eyes large, protuberant. Antennae filiform, last two antennal segments nearly equal in length.

Pronotum widest subapically above middle; not sulcate medially. Wing with anal cell closed; cross-vein between $2dA_2$ and $2dA_3$ incomplete, between $3dA_1$ and $3dA_2$ complete.

Abdomen. Male appendage rounded and densely hairy at apex, long, extending from third sternite to fifth sternite (fig. 8). Seventh sternite emarginate at apex (fig. 9). Seventh tergite entire, truncate at apex. Eighth sternite emarginate at apex (fig. 10). Eighth tergite entire at apex (fig. 11). Tegmen dorsal, median lobe ventral in orientation. Parameres slightly apically produced, irregularly polyspined dorsolaterally; basal-piece shorter than

parameres, tripartite due to two longitudinal sulci (fig. 12). Median lobe with apical end nearly arrow-shaped; cuticular blades basally sharply pointed, without serrations; median struts short (fig. 13).

Female (author's no. 439), same locality as the male, in the B. M. (N. H.).

The female differs from the male as follows. Head very slightly narrower than pronotum at its widest part. A weak, median pronotal sulcus distinct. Seventh abdominal sternite truncate at apex, not appreciably emarginate (fig. 14). Seventh tergite weakly emarginate at apex (fig. 15). Apex of ovipositor as in fig. 16.

Type locality. Ramnad, India.

Records and Variation. In the B. M. (N. H.): 17 males and 8 females from the above locality; 1 male and 1 female from Shembaganur, Madura, India (ex. coll. Pic and ex. coll. Moffaerts respectively). In the Hungarian Natural History Museum, Budapest: 1 male from Madura, India (Biró, 1902), species identified by M. Pic. In the Muséum National d'Histoire Naturelle, Paris: 1 male from Trichinopoli, India. Length varies from 5–5.5 mm among males and from 5.5–6.5 mm among females. In some females the seventh abdominal sternite is appreciably, weakly emarginate at apex; in others the seventh tergite is not noticeably emarginate.

Remarks. The mandible has a well-developed prostheca and small molar area. In the metendosternite (fig. 7), the laminae are well-developed and complex, and the anterior tendons arise on the laminae. These characters probably apply to the genus.

Steriphodon scoparius (CHAMPION), comb. nov.

(Figs. 17 - 27)

Eurygenius scoparius Champion, 1916, p. 200.

Hololectotype. Male (author's no. 534), Southern India: Nilgiri Hills (Andrewes), in the B. M. (N. H.).

Colour. Reddish-brown or ferruginous; head and pronotum darker, antennae and portions of legs lighter in colour; apices of mandibles black.

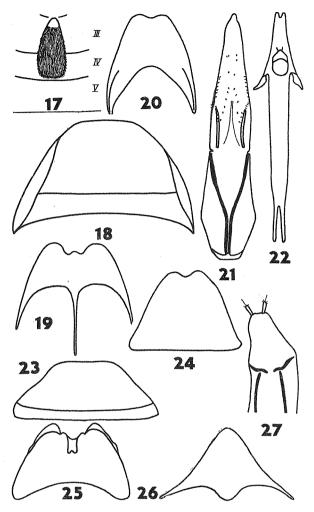
Vestiture. Pubescence sparse, not concealing surface sculpture below; consisting of decumbent, short, yellowish-brown hairs; hairs subcrect and slightly longer along margins of tempora, pronotum and elytra.

Punctures. Coarse on pronotum, vertex and neck; fine on elytra.

Head widest across eyes, slightly narrower than pronotum at its widest part. Tempora distinct, not prominent. Mandible entire at apex. Apical segment of maxillary palp cultriform. Eyes only broadly, weakly emarginate in front (practically entire), large. Antennae filiform.

Pronotum widest subapically above middle; not sulcate medially. Wing with anal cell closed; cross-vein between $2dA_2$ and $2dA_3$ incomplete, between $3dA_1$ and $3dA_2$ absent.

Abdomen. Male appendage densely hairy, short, extending from third sternite to apex of fourth sternite (fig. 17). Seventh sternite entire at apex (fig. 18). Seventh tergite truncate, with a weak indication of a broad emargination at apex. Eighth sternite emarginate, with a short central process (fig. 19). Eighth tergite emarginate at apex (fig. 20). Tegmen dorsal, median lobe ventral in orientation. Parameres slightly apically produced; arrangement of spines essentially irregular, with indications of two pairs of longitudinal rows; a pair of



Figs. 17-27. Steriphodon scoparius (Champion), comb. nov.: Hololectotype, male: 17, Abdominal appendage; 18, seventh sternite; 19, eighth sternite; 20, eighth tergite; 21, tegmen, ventral view; 22, median lobe, ventral view. — Allolectotype, female: 23, seventh sternite; 24, seventh tergite; 25, eighth sternite; 26, eighth tergite; 27, apex of ovipositor, ventral view

ventral ridges present on parameres towards base; basal-piece slightly shorter than parameres, tripartite due to two longitudinal sulci (fig. 21). Median lobe with apical end nearly arrow-shaped; cuticular blades not serrate; median struts short (fig. 22).

Allolectotype. Female (author's no. 485), same locality as the male, in the B. M. (N. H.).

The female differs from the male as follows. Anal cell of wing open (nearly closed). Seventh abdominal sternite truncate at apex (fig. 23). Seventh tergite deeply emarginate at

apex (fig. 24). Eighth sternite and tergite as in figs. 25 and 26. Apex of ovipositor as in fig. 27.

Paralectotypes. One male and two females, from the same locality, in the B. M. (N. H.). In one female the eyes are black and in the other female a weak, median pronotal sulcus is present. The sixth syntype of Champion, a female, is now represented by a pair of legs in the B. M. collection. Length varies from 7 to 7.5 mm among males and from 6.5 to 10 mm among females.

Remarks. Similar male ventral brush of *Eurypus* (inter alia) mentioned by Champion (1916: 200) is due to convergence.

Summary

The genus Steriphodon ABEILLE is placed in the tribe Eurygeniini and is distinguished from all other genera by the presence of appendiculate tarsal claws and male abdominal appendages. The Indian species treated in this paper include S. indicum Pic, S. scoparius (Champion), comb. nov. (transferred from Eurygenius) and S. doncasteri spec. nov.

Zusammenfassung

Die Gattung Steriphodon ABEILLE wird in die Tribus Eurygeniini eingereiht. Sie unterscheidet sich von allen anderen Gattungen durch das Vorhandensein von appendikulaten Tarsenkrallen sowie abdominalen Anhängen beim Männchen. Dieser Artikel behandelt die indischen Arten S. indicum Pic., S. scoparius (Champion), comb. nov. (übernommen von Eurygenius) und S. doncasteri spec. nov.

Резюме

Род Steriphodon Abeille включается в трибу Eurygeniini. Он отличается от всех других родов присутствием аппендикулятных тарзальных когтей и абдоминальных прибавлений у самцов. Эта статья занимается с индийскими видами S. indicum Pic, S. scoparius (Снамріон), comb. nov. (включён из Eurygenius) и S. doncasteri spec. nov.

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